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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,110	06/15/2006	Yoshikazu Tanaka	47237-5008-00-US	4016
55694 7590 05/12/2009 DRINKER BIDDLE & REATH (DC) 1500 K STREET, N.W. SUITE 1100 WASHINGTON, DC 20005-1209				
EXAMINER				
BAUM, STUART F				
ART UNIT		PAPER NUMBER		
1638				
MAIL DATE		DELIVERY MODE		
05/12/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/583,110

**Applicant(s)**

TANAKA ET AL.

**Examiner**

STUART F. BAUM

**Art Unit**

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-9 (in part) and 12-17, drawn to a gene coding for a protein having activity of transferring a sugar to the chalcone 4'-position, or wherein the gene encodes SEQ ID NO:2 or variants thereof, or wherein the gene is SEQ ID NO:1 or variants thereof; a vector, host cell, plant and methods comprising said gene.

Group II, claim(s) 1-9 (in part) and 12-17, drawn to a gene coding for a protein having activity of transferring a sugar to the chalcone 4'-position, or wherein the gene encodes SEQ ID NO:70 or variants thereof, or wherein the gene is SEQ ID NO:69 or variants thereof; a vector, host cell, plant and methods comprising said gene.

Group III, claim(s) 10-11, drawn to a protein and method of producing said protein.

Group IV, claim 18, drawn to a method of introducing and expressing a gene coding for a protein having activity of transferring a sugar to the chalcone 4'-position together with a gene coding for aureusidin synthase in a plant while also inhibiting expression of a flavonoid synthesis pathway gene in the host to alter the flower color to yellow.

Group V, claim 19, drawn to a method of introducing and expressing a gene coding for a protein having activity of transferring a sugar to the chalcone 4'-position together with a gene coding for aureusidin synthase in a plant while also inhibiting expression of the dihydroflavonol reductase gene in the host to alter the flower color to yellow.

Group VI, claim 20, drawn to a method of introducing and expressing a gene coding for a protein having activity of transferring a sugar to the chalcone 4'-position together with a gene coding for aureusidin synthase in a plant while also inhibiting expression of the flavanone 3-hydrosylase gene in the host to alter the flower color to yellow.

**If Applicants elect any one of Groups III-VI, Applicants are to also elect one DNA sequence from claim 5 and one corresponding amino acid sequence from claim 2.**

2. Pursuant to 37 CFR 1.475(d), the ISA/US considers that where multiple products and processes are claimed, the main invention shall consist of the first invention of the category first mentioned in the claims and the first recited invention of each of the other categories related thereto. Accordingly, the main invention (Group I) comprises the first recited product, a gene coding for a protein having activity of transferring a sugar to the chalcone 4'-position, wherein the gene codes SEQ ID NO:2, or wherein the gene is SEQ ID NO:1 or variants thereof; a vector, host cell, plant and method comprising said gene. Further pursuant to 37 CFR 1.475(d), the ISA/US considers that any feature which the subsequently recited products and methods share with the main invention does not constitute a special technical feature within the meaning of PCT Rule 13.2 and that each of such products and methods accordingly defines a separate invention.

3. Applicants' chemical compounds, i.e., different DNA sequences encoding different polypeptides, each have different properties and different core structures and a search for one sequence does not encompass a search for the other sequence; and as such, the Groups I-II are not linked by, or share, a single special technical feature.
4. Each of Inventions I-VI are capable of being separately made, independently used and the patentability of one does not render the others obvious or unpatentable.
5. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by the literature and sequence searches required for each of the Inventions are not required for another of the Inventions, restriction for examination purposes as indicated is proper.
6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Stuart F. Baum/  
Stuart F. Baum Ph.D.  
Primary Examiner  
Art Unit 1638  
May 10, 2009